D. Comments on Subpart D - Operational and Technical Requirements

Section 22.303 (Posting station authorizations.)

This section requires, among other things, that the station call sign be marked on every transmitter. To the best of GTE's knowledge, this is a new requirement.9 GTE has no objection to the general idea of identifying station transmitters. However, the requirement as set forth in proposed Section 22.303 is unnecessarily rigid in requiring that the call sign be placed on the transmitter itself. Requiring that the transmitter itself be marked ignores the fact that transmitters are often switched out of a particular system and used in other locations. Thus, the transmitter marking requirement could be unduly burdensome on licensees by requiring them frequently to change markings. GTE believes that the Commission's purposes with this section could be achieved just as well if licensees were allowed to post a diagram or chart of some type that matched transmitter to call sign. Thus, Section 22.303 should be modified to permit the licensee to identify transmitters to call signs by means other than transmitter markings.10

The current Section 22.201 only requires the current original authorization for each station to be retained as a permanent part of station records -- but not posted; and a photocopy of the authorization for each base or fixed station is to be posted at every control point of the station.

For example, in the 800 MHz ATG Service all base station transmitters of a licensee are the same call sign, regardless of where in the U.S. they are located. GTE can see no value in having each of these transmitters physically marked with the same call sign.

Section 22.313 (Station identification.)

Section 22.313 requires that station identification be transmitted with each transmission. GTE has two comments regarding this section.

First, GTE notes that the <u>current</u> rule exempts stations in the 800 MHz ATG Service from the requirement.¹¹ The proposed Section 22.313 contains no such exemption. Further, the Notice provides no explanation why the exemption was dropped. GTE believes that the exemption for 800 MHz ATG Service should be retained. Transmission of station identification in the 800 MHz ATG Service is both impractical and expensive and would be annoying to airline passengers using the service. But more importantly, such transmission would not further the Commission's goals for this requirement, which are to ease the process of identifying interfering transmissions so that undue interference can be readily eliminated. That is because the nature of some of the modulation schemes used on certain 800 MHz ATG transmissions are such that voice and call sign transmissions would not be identifiable. GTE notes that no similar requirement exists or is proposed for cellular transmissions. Accordingly, GTE believes it would be appropriate for the Commission to retain its exemption for station identification in the 800 MHz ATG Service.

GTE's second comment concerns station identification in BETRS. GTE notes that most of the type-accepted BETRS hardware is unable to transmit station identification. Accordingly, some applicants for BETRS licensees routinely request a waiver of the station identification requirement, and the waiver has been normally granted over the past few years without any detrimental effects. More recently, however, it has been determined that a

¹¹ Current Section 22.213(e).

waiver may not even be required since the current Section 22.313(a) provides that "the requirement for transmission of station identification is waived for fixed stations employing continuous radiation with multichannel . . . transmission." In light of these facts, the Commission may wish to consider maintaining the exemption for BETRS licensees in Section 22.313. Such an exemption would eliminate seemingly unnecessary administrative burdens for both the Commission and BETRS applicants and be consistent with the equipment the FCC has type accepted for this application.

Section 22.365 (Antenna structures; air navigation safety.)

Section 22.365 requires licensees to comply with specified requirements regarding the marking, lighting, and maintenance of antenna structures. The goal of this section is to ensure that antenna structures do not become a hazard to air navigation.

GTE understands the importance of keeping antenna structures properly marked, lit, and maintained. However, GTE asks the Commission to consider eliminating the requirement for licensees whose stations are located on towers or other antenna structures that the licensees do not own or control. In these cases, it is not always possible for the licensee to ensure that the obligations for tower lighting, marking, and maintenance are undertaken by the entity in actual control of the tower — the tower owner. If a particular tower is the only place in that area on which a station can be located (because of zoning constraints, terrain, or the like), the tower owner may be unwilling to take contractual responsibility for the condition of the tower. The tower owner has no incentive to take on such obligations. Since the FAA also has jurisdiction over this matter,

GTE suggests that the Commission defer to that agency.¹² If there are many licensees on a particular antenna structure, then letting the FAA handle the matter directly with the tower owner would minimize the administrative burden of the matter for the Commission and its licensees.

Section 22.368 (Quiet zones.)

This section, which describes the areas in which it is necessary to restrict radiation, contains various paragraph numbering errors that should be corrected in the final rules.

E. Comments on Subpart E - Paging and Radiotelephone Service Sections 22.537 and 22.567 (Technical channel assignment criteria.)

Sections 22.537 and 22.567 establish the technical assignment criteria for one-way paging and one-way and two-way mobile channels, respectively.

GTE's comments on these sections concern the Commission's proposal to drop the Carey method for determining the potential for interference from proposed stations in favor of computer studies using specified formulas.

GTE supports the Commission's proposal. GTE has reviewed the formulas proposed and believes that they accurately predict the level of interference to be expected where Height Above Average Terrain is more than 30 meters. To ease the burden of analyzing interference studies, GTE suggests that the Commission develop a standardized presentation form for these studies

The Commission has deferred to the FAA on other matters that concern both agencies. In CC Docket No. 88-411, the Commission deferred to the FAA concerning the on ground use of cellular telephones on board aircraft. (See Report and Order, FCC 91-399, released December 30, 1991 and current Section 22.911(a)(1) and proposed Section 22.925.)

to be included in the application. Also, the Commission should put a check-off box on FCC Form 401 for interference analysis exhibits so that it is readily apparent to the public and the FCC staff when there are possible co-channel interference problems with the proposed station.

F. Comments on Subpart F - Rural Radiotelephone Service Section 22.715 (Technical channel assignment criteria for rural radiotelephone stations.)

GTE feels that the limit of two (2) channels per application as stated as a general policy by Section 22.569 should not apply to Basic Exchange Telecommunications Radio Service ("BETRS"). GTE has been aggressively pursuing a rural upgrade plan which gives its rural customers single party, P.01 grade of service in its BETRS system configurations. These grade-of-service levels are often dictated by state Public Utility Commissions and customer expectations.

GTE feels that with the current rural radio technology, channel allocations should be based on "customer demand with each application submitted" for rural radio service. The current constraints of accessible terrain, co-channel interference, and adjacent channel interference will also be determining factors in channel allocation. The success of Rural Radio Service and the provisioning of this service should not be stifled by a two channel allocation policy that was designed to prevent warehousing of mobile radio spectrum when demand indicates that multiple channels are required to provide the required rural service.

G. Comments on Subpart G - Air-Ground Radiotelephone Service

General Comments

As noted above, the location of ground stations in the 800 MHz ATG Service near the border of Canada is governed by the ATG Agreement. As such, GTE recommends that the requirements of the ATG Agreement be reflected in the relevant rules regarding this service and also referenced in Section 1.955. Such action should minimize the potential for misinterpretation in light of possibly conflicting rules. Thus, GTE recommends a new Section be added -- possibly Section 22.804 -- reflecting the U.S. - Canadian decisions reached in the ATG Agreement.

Section 22.803 (Procedure for mutually exclusive ground station applications.)

Due to the nature of the 800 MHz ATG Service, e.g., the sharing of the same spectrum by all licensees for use as communications channels, special circumstances exist that necessitate special handling of mutually exclusive applications for ground stations. The procedure should not follow a first-to-file basis, but instead applications should be considered according to the following procedure:

When: (1) more than one application for ground stations have been received by the Commission such that the applications would not meet the distance separation for co-channel ground stations under Sections 22.813(a) or 22.859 if all applications were granted; and (2) all subsequent applications have been filed prior to the first filed application being placed on public notice; and (3) the locations of such ground stations have not been coordinated with or received industry concurrence, then, the FCC should hold a settlement conference in accordance with Section 22.135. In the event industry concurrence is not

reached, then the FCC can make a selection from those mutually exclusive applications.

GENERAL AVIATION AIR-GROUND STATIONS Section 22.805 (Channels for general aviation air-ground service.)

In this section, the Commission has listed the channels for use in the general aviation air-ground service. However, the Commission has added a new restriction that is not contained in the current rule Section 22.521. In the proposed Section 22.805 the FCC has restricted the frequencies to use on general aviation, non-commercial aircraft (emphasis added). Thus, if Federal Express on its commercial jet cargo fleet wanted to use these channels today, it could, yet the proposed rule would bar such use. This is another case of changes with no rationale being provided as required by the APA. GTE recommends deletion of this limitation.

COMMERCIAL AVIATION AIR-GROUND SYSTEMS Section 22.857 (Channel plan for commercial aviation air-ground systems.)

Service. GTE's problem with this section concerns the first sentence, in which the Commission states that the 800 MHz frequency blocks are allocated for ATG systems that provide "service to passengers aboard commercial aircraft" (emphasis supplied). By defining the 800 MHz ATG Service in this fashion, the Commission appears to prohibit the use of this service on non-commercial airplanes. As such, this definition directly contradicts the Commission's stated policy, as set forth in the Commission's Report and Order in GEN Docket No. 88-

96, of permitting the use of 800 MHz ATG systems aboard non-commercial as well as commercial aircraft. 13

The distinction between commercial and non-commercial aircraft is not as clear as the Commission's Rules suggest. GTE Airfone is currently providing its 800 MHz ATG Service to passengers aboard general aviation aircraft and, like other 800 MHz ATG licensees, is actively pursuing potential business in this market segment. The Commission offers no explanation why such activity no longer serves the public interest and should be prohibited. Accordingly, the Commission should modify this section (and any other section similarly affected) to eliminate the proposed restriction. The distinctions between the service provided in the 450 MHz band and the service provided in the 800 MHz band should not be made on the basis of the type of aircraft currently served as a clear distinction between general aviation and commercial aircraft does not exist.

Section 22.859 (Geographical channel block layout.)

Section 22.859 establishes the geographical restrictions on the placement of ground stations in the 800 MHz ATG Service. GTE has three comments regarding this section.

First, the geographical channel block layout set forth in the proposed rules does not reflect the currently approved layout. Specifically, the layout does not include the corrections adopted by the Commission in July, 1991.¹⁴ The layout

See 5 FCC Rcd 3861 at footnote 18, where the Commission stated: "[W]e never intended to limit the use of the service solely to commercial aircraft. To the extent non-commercial aircraft wish to use this service they may do so."

See ERRATUM in GEN Docket No. 88-96, Mimeo No. 14037, released July 22, 1991.

contained in the proposed Section 22.859 should be modified to reflect these changes.

Second, the Commission has also approved the following additional full-power ground station locations: California, San Jose; Florida, Miami; Hawaii, Makawao and Pepeekeo; Maine, Holden; South Dakota, Mitchell; and Texas, San Antonio. These would need to be reflected in the final rules.

Third, GTE recommends that the Commission not include on the list those locations that have been approved for <u>low-power</u> stations. (Currently Irving, Texas and Tulsa, Oklahoma.) GTE believes that it is confusing to list these locations with the locations of <u>full-power</u> ground stations. The locations of these approved low-power stations must still be coordinated to meet the requirements of Section 22.859, but do not have the same distance and power requirements. Accordingly, GTE believes that only full-power station locations should be listed in Section 22.859.¹⁵

Section 22.861 (Emission limitations.)

Section 22.861 describes emission limitations for channels in the 800 MHz ATG Service. GTE recommends that the Commission explicitly state in this section that the power levels referenced therein refer to peak power levels. Unless the Commission specifies the standard of measurement, different licensees could use different standards. Generally power is gauged on average over a time interval. Different time intervals and averages would create a greater possibility of interference. Specifying one standard would limit this possibility. GTE suggests that the Commission select peak power as the

Should the Commission still decide to list low-power ground stations in its rules, then there should be separate lists for full-power and low-power ground stations.

standard because the rule as previously written (Section 22.1111) required the power levels to be a certain level below the peak envelope power of emission.

Section 22.863 (Transmitter frequency tolerance.)

This section, which concerns ground station transmitter frequency tolerance, contains several significant typographical errors. Accordingly, the section should be revised to read:

Ground station transmitter frequencies must be maintained within \pm 0.1 parts per million (ppm) of the channel reference or center frequencies. Doppler shift correction must be used to ensure that the frequencies of the signals of airborne mobile stations received at ground stations remain within \pm 0.2 ppm of the channel reference or center frequencies. (emphasis supplied)

As modified, the section reflects the frequency tolerances specified in existing Section 22.1113.

Section 22.875 (Commercial aviation air-ground system application requirements.)

Section 22.875 describes the filing requirements for applications for new nationwide 800 MHz ATG systems. One of the requirements, set forth at Section 22.875(c)(4), calls for the submission of a service plan containing a projection of the system capacity in terms of the maximum number of calls per hour in each area. GTE recommends that the Commission delete this requirement. In light of the fact that all the communications channels in the 800 MHz ATG Service can be shared by all licensees (and, thus, all communications channels are available to all operators), this requirement has no relevance in this service.

H. <u>Comments on Subpart H - Cellular Radiotelephone Service</u> Section 22.901 (Cellular service requirements and limitations.)

GTE fully supports Commission efforts to allow cellular licensees increased flexibility in the use of their spectrum. At the present time cellular licensees have some flexibility under the current rules, Sections 22.308 and 22.930. Thus, GTE agrees with the FCC's proposal to expand that flexibility and eliminate the current restriction contained in Section 22.930 limiting fixed service to BETRS. In addition, GTE encourages the FCC to further expand cellular service options and allow cellular carriers to provide auxiliary non-common carrier services as proposed by Telocator in RM-7823. Expanding service options would enhance competition and bring more services to the American public.

With respect to limitations on cellular service, proposed Section 22.901(c) prohibits dispatch service. There is no definition of dispatch service in the NPRM. GTE urges the Commission to codify the definition of dispatch service the Commission adopted in GEN. Docket No. 87-390.¹⁷ The definition adopted there clarified that dispatch-type communications can be provided on cellular frequencies so long as the communication is not directly between a dispatcher and end users, <u>i.e.</u>, dispatch service.

In its Notice of Proposed Rulemaking and Tentative Decision in GEN Docket No. 90-314, released August 14, 1992, the Commission proposes even further flexibility for cellular providers. There the Commission proposed to revise Section 22.930 to state explicitly that cellular licensees may provide Personal Communications Services ("PCS")-type services, such as wireless PBX, data transmission and telepoint services.

¹⁷ See 3 FCC Rcd 7033, ¶77.

Section 22.911 (Cellular geographic service area.)

GTE urges the Commission to specifically define the Cellular Geographic Service Area ("CGSA") and CGSA extension. Since the Commission adopted 32 dBu contours, many overlapping CGSAs have resulted. It is not clear which cellular provider has the right to claim the overlapped territory.

Section 22.919 (Electronic serial numbers.)

Section 22.919 specifies new requirements for the electronic serial numbers ("ESNs") that are used to identify mobile equipment to cellular systems. The requirements are designed to reduce the potential for fraud against the cellular carriers as a result of tampering with the ESNs.

GTE supports the concept that underlies these new requirements. However, the rule as written is too broad, in that it would apply to all cellular phones, including those already in use. Such phones should not be subject to the requirement because of the costs and difficulties associated with modifying such phones. Accordingly, the Commission should modify the section by specifying that the requirement applies only to phones manufactured after a particular date.

Section 22.943 (Limitations on assignment of cellular authorizations.)

Section 22.943(b) prohibits the sale, transfer, assignment or other alienation of any application to operate a new cellular system in a rural service area ("RSA"). The FCC should clarify whether this is for the unserved area or the entire RSA. Currently cellular providers transfer entire RSA licenses and the FCC has not stated why such transfers should be prohibited.

Section 22.946 (Construction periods and requirements for cellular systems.)

Under Section 22.946(a)(2) GTE recommends adding the words: "mailed no later than 15 days after service begins," in order to be consistent with proposed Section 22.142(b).

Section 22.949 (Unserved area licensing phases, procedures and filing windows.)

Section 22.949 establishes the licensing process for unserved areas in cellular markets. Section 22.949(a) specifies a one-day filing window for applications for authority to operate new cellular systems in unserved areas. GTE believes that such a short filing window is unrealistic and impractical. Accordingly, GTE recommends that the Commission specify a five (5) day filing window for Phase 1 applications instead.

III. CONCLUSION

Eliminating unnecessary regulations and streamlining those that remain are valid goals. However, in carrying out these tasks, the Commission must proceed with caution. As shown herein, seemingly simple changes to the rules can have a major impact on the carriers affected. Thus, in implementing its rewrite of Part 22 of the Rules, the Commission must ensure that its rules as

rewritten achieve only the purposes intended. Modifying the proposed rules as suggested herein by GTE should be the Commission's first step in that regard.

Respectfully submitted,

GTE SERVICE CORPORATION

on behalf of its affiliated domestic telephone operating, cellular, and air-ground companies

By:

Daniel L. Bart 1850 M Street, NW

Suite 1200

Washington, DC 20036

(202) 463-5212

October 5, 1992

Its Attorney

Certificate of Service

I, Jennifer R. McCain, hereby certify that copies of the foregoing "Comments" of GTE have been mailed by first class United States mail, postage prepaid, on the 5th day of October, 1992 to the following parties:

Cleve Watkins Vice President, Technology The Antenna Specialists Company 30500 Bruce Industrial Parkway Cleveland, OH 44139

Jeffrey Krauss Consultant 17 West Jefferson Street. Suite 106 Rockville, MD 20850

Michael Binder
Assistant Deputy Minister
Research and Spectrum
Government of Canada
Department of Communications
300 Slater Street
Ottawa, Ontario KIA OC8

Thomas E. Wheeler, President and CEO Cellular Telecommunications Industry Assoc. 1133 21st Street, NW Third Floor Washington, DC 20036

Thomas A. Stroup, President Telocator 1019 19th Street, NW Suite 1100 Washington, DC 20036